

West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin III
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Dominion Transmission, Inc.
Loup Creek Compressor Station
R30-10900019-2006

John A. Benedict
Director

Issued: September 19, 2006 • Effective: October 3, 2006
Expiration: September 19, 2011 • Renewal Application Due: March 19, 2011

Permit Number: **R30-10900019-2006**
Permittee: **Dominion Transmission, Inc**
Facility Name: **Loup Creek Compressor Station**
Mailing Address: 445 West Main Street
Clarksburg, WV 26301

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Kopperston, Wyoming County, West Virginia
Mailing Address:	Route 85, Kopperston, WV 24854
Telephone Number:	(304) 682-6302
Type of Business Entity:	Corporation
Facility Description:	Natural gas transmission facility
SIC Codes:	4922
UTM Coordinates:	449.31 km Easting • 4176.86 km Northing • Zone 17

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001-01*	EN01	Reciprocating Engine/Integral Compressor; Cooper GMV-8TF	1947	880 HP	N/A
001-02*	EN02	Reciprocating Engine/Integral Compressor; Cooper GMV-8TF	1947	880 HP	N/A
001-03*	EN03	Reciprocating Engine/Integral Compressor; Cooper GMV-8TF	1947	880 HP	N/A
001-04*	EN04	Reciprocating Engine/Integral Compressor; Caterpillar G3516	2001	1085 HP	N/A
002-01*	AUX	Reciprocating Engine/Auxiliary Generator; Waukesha F1197G, 4-Natural, 7000 Btu/hp-hr	2001	300 HP	N/A
<u>RBR01</u>	<u>RBR01</u>	<u>Dehydration Unit Reboiler</u>	<u>2010</u>	<u>1.5mmbtu/hr</u>	<u>N/A</u>
<u>DEHY01</u>	<u>DEHY01</u>	<u>Dehydration Unit/Still Column</u>	<u>2010</u>	<u>35mmcf/day</u>	<u>F1</u>
<u>F1</u>	<u>F1</u>	<u>Dehydration Unit Controlled Flare</u>	<u>2010</u>	<u>0.2mmbtu/hr</u>	<u>F1</u>
004-01*	DEHY	Dehydration Unit Still; BS&B International	1950	35 mmcf/day	Flare
005-01*	RBR01	Dehydration Reboiler; Nateo 5GR-500	1996	0.70 MMBtu/hr	N/A
0001*	DEHY	Dehydration unit flare; 95% destruction efficiency	1997	176.9 acf/min	N/A
TK01	TK01	Horizontal Above Ground Ethylene Glycol Storage Tank	1950	563 gallons	N/A
TK04	TK04	Vertical Above Ground Ethylene Glycol Storage Tank	1989	4200 gallons	N/A
TK05	TK05	Vertical Above Ground Pipeline Fluids Tank	2002	4200 gallons	N/A
TK06	TK06	XXX Engine Oil Tank	2002	5000 gallons	N/A
TK07	TK07	XXX Engine Oil Tank	2002	1000 gallons	N/A
TK08	TK08	Used Oil Tank	2002	1000 gallons	N/A
TK09	TK09	Used Triethylene Glycol Tank	2002	2100 gallons	N/A
TK10	TK10	Horizontal Above Ground Ethylene Glycol Tank	2006	1000 gallons	N/A

* This equipment burns or combusts pipeline quality natural gas only.

1.2 **Active R13, R14, and R19 Permits**

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

<u>Permit Number</u>	<u>Date of Issuance</u>
<u>R13-2839</u>	<u>7/9/2010</u>

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source
CBI	Confidential Business Information		Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations		
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant Deterioration
DEP	Department of Environmental Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial Classification
HAP	Hazardous Air Pollutant		
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower		
lbs/hr or lb/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
M	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
		TSP	Total Suspended Particulate
MM	Million		
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	USEPA	United States Environmental Protection Agency
MMCF/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA	Not Applicable	UTM	Universal Transverse Mercator
NAAQS	National Ambient Air Quality Standards	VEE	Visual Emissions Evaluation
NESHAPS	National Emissions Standards for Hazardous Air Pollutants	VOC	Volatile Organic Compounds
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.

- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements. **[45CSR§30-2.39]**

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;

- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.
[40 C.F.R. 61 and 45CSR15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161. **[40 C.F.R. 82, Subpart F]**
- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]
- 3.1.9. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.
[45CSR§10-4.1] [DEHY01, ~~DEHY~~ F1]
- 3.1.10. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.
[45CSR§10-5.1] [DEHY01, ~~DEHY~~ F1]
- 3.1.11. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
[45CSR§17-3.1; State Enforceable Only]
- 3.1.12. Emissions to the atmosphere for the 1085 HP Caterpillar Engine, Model G3516, Source ID 001-04, Emission Point ID EN04, shall not exceed the following amounts:

Pollutant	Emission Rates	
	lb/hr	tons/year
Nitrogen Oxides (NO _x)	3.80	16.60
Carbon Monoxide (CO)	4.56	20.00
Volatile Organic Compounds (VOC)	1.27	5.60
Sulfur Dioxide (SO ₂)	0.005	0.021
Particulate Matter (PM ₁₀)	0.080	0.352

Please Note: The new 1085 HP Caterpillar Engine, Model G3516, Source ID 001-04, Emission Point ID EN04 is replacing the existing 800 HP Cooper-Bessemer Engine, Model GMV-8, Source ID 001-04, Emission Point ID EN04.
[45CSR13, R13-2324B, A.1]

- 3.1.13. The maximum operating hours of the 300 HP, Waukesha Auxiliary Power Generator shall not exceed 500 hours per year. **[45CSR13, R13-2324B, A.4]**

- 3.1.14. The maximum fuel/natural gas consumption rate for the 300 HP, Waukesha Auxiliary Power Generator shall not exceed 2,000 ft³/hr and 1 x 10⁶ ft³/yr (based on 1,030 Btu/ft³ of natural gas and 500 hours of operation each year).

[45CSR13, R13-2324B, A.5]

- 3.1.15. Emissions of nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM), and volatile organic compounds (VOC), for the 300 HP, Waukesha Auxiliary Power Generator shall not exceed the following hourly and annual limitations:

Regulated Pollutant	Maximum Emissions - 300 HP Waukesha Natural Gas Auxiliary Power Generator	
	(lb/hr)	(ton/yr)*
NO _x	7.94	1.98
CO	7.94	1.98
SO ₂	0.01	0.003
PM	0.02	0.005
VOC	0.20	0.05

* Based on 500 hours of operation.

[45CSR13, R13-2324B, A.6]

- 3.1.16 Minor Source of Hazardous Air Pollutants (HAP). HAP emissions from the facility shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the facility is a minor HAP source.

[45CSR13, R13-2839, 4.1.2.]

- 3.1.17 Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11., 45CSR13, R13-2839, 4.1.3]

3.2. Monitoring Requirements

- 3.2.1. Visual emission checks of each emission point specified shall be conducted monthly. If during these checks or at any other time visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with Method 9 of 40 C.F.R. 60, Appendix A. Records shall be maintained on site for a period of no less than five (5) years stating the date and time of each visible emission check, whether visible emissions were observed, the opacity observed, and the corrective measures taken. Visible emission checks shall not be required during start-ups, shut-downs and malfunctions.

[45CSR§30-5.1.c] [~~DEHY~~ F1]

- 3.2.2. At a minimum of once per year, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of Sulfur. Proof of compliance with the 2000 ppm_v limit will be considered demonstrated if the gas chromatograph shows a total sulfur content of 6.1885 grains/100ft³ or less. Records

shall be maintained on site or at a reasonable available location for a period of no less than five (5) years stating the date and time of analysis and the sulfur content of the gas sampled.

[45CSR§30-5.1.c] [[DEHY F1](#), DEHY01]

- 3.2.3. At a minimum of once per year, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of H₂S. Proof of compliance with the 50 grains/100ft³ limit will be considered demonstrated if the gas chromatograph shows a total H₂S content of 0.7278 grains/100ft³ or less. Records shall be maintained on site or at a reasonably available location stating the date of analysis and the hydrogen sulfide content of the gas sampled.

[45CSR§30-5.1.c] [[DEHY F1](#), DEHY01]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. Such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.

[WV Code § 22-5-4(a)(15) and 45CSR13]

- 3.3.2. At such reasonable time(s) as the Director may designate, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations as set forth in 3.1.12 and 3.1.15. Test(s) shall be conducted in accordance with 3.3.3 and 3.3.1 contained herein. The Director, or his duly authorized representative, may, at his option, witness or conduct such tests. Should the Director exercise his option to conduct such test(s), the operator shall provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR13, R13-2324B, B.1]

- 3.3.3. Tests that are required by the Director to determine compliance with the emission limitations set forth in 3.1.12 and 3.1.15 shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at 100% of the peak load unless otherwise specified by the Director.
- a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H as set forth in 40 CFR 60, Appendix A.
 - b. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C as set forth in 40 CFR 60, Appendix A.
 - c. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 CFR 60, Appendix A.
 - d. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 CFR 60, Appendix A.
 - e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 CFR 60, Appendix A.
 - f. Tests to determine compliance with Opacity of emissions shall be conducted in accordance with Method 9 as set forth in 40 CFR 60, Appendix A.
- [45CSR13, R13-2324B, B.3]**

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
- \

- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13, R13-2839, 4.1.1.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. For the purpose of determining compliance with the maximum hours of operation and maximum fuel consumption rate limits set forth in 3.1.13 and 3.1.14, the permittee shall maintain certified monthly and annual records of operating hours and natural gas consumption. Said records shall be maintained in a manner similar to Attachment A and Attachment B. Said records shall be maintained on site for a period of five (5) years. Said records shall be made available and certified upon request by the Director or his/her duly authorized representative.

[45CSR13, R13-2324B, B.2]

3.4.5 Record of Malfunctions of Air Pollution Control Equipment.

For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2839, 4.1.4.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.3. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.4. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3 APD Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.5. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period

July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.6. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.7. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.8. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. **Compliance Plan**

N/A

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
- N/A

3.8. Emergency Operating Scenario

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

- a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
- b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
- c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
- d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
- e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
 - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
 - ii. Identification of the engine(s) being temporarily replaced;
 - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
 - iv. Projected duration of the replacement engine(s); and
 - v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.0 Source-Specific Requirements [[Reboiler](#), RBR01]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1, [45CSR13, R13-2839, 5.1.1](#)]
- 4.1.2. [Compliance with the visible emission requirements of 45CSR§2-3.1 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.](#)
[45CSR§2-3.2., [45CSR13, R13-2839, 5.1.2](#)]
- 4.1.3. [Maximum Design Heat Input. The maximum design heat input for the NATCO Glycol Reboiler \(RBR01\) shall not exceed 1.5 mmBTU/hr.](#)
[45CSR13, [R13-2839, 5.1.3](#)]
- 4.1.4. [The quantity of natural gas that shall be consumed in the 1.5 MMBtu/hr NATCO Glycol Reboiler \(RBR01\) shall not exceed 1,500 cubic feet per hour or 13.14 x 10⁶ cubic feet per year.](#)
[45CSR13, [R13-2839, 5.1.4](#)]
- 4.1.5. [Maximum emissions from the NATCO Glycol Reboiler \(RBR01\) shall not exceed the following limits:](#)

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.15	0.66
Carbon Monoxide	0.13	0.55

[45CSR13, [R13-2839, 5.1.5](#)]

4.2. Monitoring Requirements

N/A

- 4.2.1. [At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 4.1.1. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.](#)
[45CSR13, [R13-2839, 5.2.1](#)]
- 4.2.2. [The permittee shall monitor the natural gas consumed in the NATCO Glycol Reboiler \(RBR01\) on a monthly basis.](#)
[45CSR13, [R13-2839, 5.2.2](#)]

4.3. Testing Requirements

N/A

4.4. Recordkeeping Requirements

[N/A](#)

[4.4.1.](#) To demonstrate compliance with section 4.1.4 and 4.1.5, the permittee shall maintain records of the amount of natural gas consumed in the NATCO Glycol Reboiler (RBR01). Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official. [45CSR13, R13-2839, 5.3.1]

4.5. Reporting Requirements

N/A

4.6. Compliance Plan

N/A

5.0 Source-Specific Requirements [~~DEHY F1~~, DEHY01] (Natural Gas Dehydration Units (DEHY01) Not Subject to MACT Standards and being controlled by a Flare Control Device (F1))

5.1. Limitations and Standards

- 5.1.1. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity: Factor F

A. Less than 15,000 lbs/hr 5.43

B. 15,000 lbs/hr or greater 2.72

Calculation for PM Emissions:

(5.43) x (~~176.9~~ 230.08 cf/min) x (60 min/hr) x (0.03744 lb/cf) x (ton/2000 lb)

= ~~1.0789~~ 1.40 lb/hr

[45CSR§6-4.1][~~DEHY F1~~]

~~5.1.2. Emission of Visible Particulate Matter—No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR§6-4.3][DEHY]~~

5.1.2. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5][~~DEHY F1~~]

~~5.1.3. 5.1.4. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6][DEHY]~~

5.1.3. Maximum Throughput Limitation. The maximum wet natural gas throughput to the NATCO glycol dehydration unit (DEHY01) shall not exceed 35 mmcf/day. Compliance with the Maximum Throughput Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the monthly throughput at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-2839, 6.1.1]

5.1.4. Maximum emissions from the Questor Q250 flare (F1) shall not exceed the following limits:

<u>Pollutant</u>	<u>Maximum Hourly Emissions (lb/hr)</u>	<u>Maximum Annual Emissions (ton/year)</u>
<u>Volatile Organic Compounds</u>	<u>4.47</u>	<u>19.57</u>
<u>Benzene</u>	<u>0.10</u>	<u>0.42</u>

<u>Ethylbenzene</u>	<u>0.22</u>	<u>0.98</u>
<u>n-Hexane</u>	<u>0.03</u>	<u>0.11</u>
<u>Toluene</u>	<u>0.15</u>	<u>0.67</u>
<u>Xylene</u>	<u>0.40</u>	<u>1.74</u>

[45CSR13, R13-2839, 6.1.2]

5.1.5. For purposes of determining potential HAP emissions at transmission and storage facilities to comply with the requirements in Section 3.1.16, the methods specified in 40 CFR 63, Subpart HHH shall be used. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 CFR 63, Subpart HH (i.e. excluding compressor engines from HAP PTE) shall be used. [45CSR13, R13-2839, 6.1.3]

5.1.6. Flare (F1) subject to this section shall be designed and operated in accordance with the following:

- a. Flare (F1) shall be non-assisted.
- b. Flare (F1) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- c. Flare (F1) shall be operated, with a flame present at all times whenever emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.
- d. A flare shall be used only where the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or where the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K=Constant=

$$1.740 \times 10^{-7} \left(\frac{1}{ppmv} \right) \left(\frac{g\text{-mole}}{scm} \right) \left(\frac{MJ}{kcal} \right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

C_i=Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).

H_i=Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.

n=Number of sample components.

- e. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by 5.1.6.f and 5.1.6.g of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross-sectional area of the flare tip, which may be determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).
- f. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 5.1.6.e. of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- g. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 5.1.6.e. of this section, less than the velocity V_{max} , as determined by the calculation specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max} , for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

Where:

V_{max} =Maximum permitted velocity, m/sec.

28.8=Constant.

31.7=Constant.

H_T =The net heating value as determined in 5.1.6.d of this section

[45CSR13, R13-2839, 6.1.4]

- 5.1.7. The permittee is not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2) until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 5.3.3, but the permittee is required to conduct a flare design evaluation in accordance with section 5.4.3. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of section 5.1.6. by complying with the compliance assessment testing requirements of section 5.3.3.

[45CSR13, R13-2839, 6.1.5]

- 5.1.8. Visible particulate matter emissions from the flare (F1) shall not exceed twenty (20%) percent opacity.

[45CSR§6-4.3., 45CSR13, R13-2839, 6.1.6]

- 5.1.9. The provisions of permit condition 5.1.8 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.

[45CSR§6-4.4., 45CSR13, R13-2839, 6.1.7]

- 5.1.10. The flare (F1) including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

[45CSR§6-4.6., 45CSR13, R13-2839, 6.1.8]

- ~~5.1.5~~ 5.1.11. The permittee has defined the facility as a minor source of HAPs for existing source MACT applicability purposes. As a result, the subject facility shall conduct monitoring, testing, and reporting as specified below in order to provide adequate justification for maintaining minor source status. This requirement shall in no way restrict the permittee from conducting more frequent testing to quantify emissions increases.

[40CFR§63.10(b)(3); (Subpart HH)] [DEHY F1]

5.2. Monitoring Requirements

- 5.2.1. In order to demonstrate compliance with the minor source status claimed within 5.1.[5-11](#) the permittee shall use GRI-GLYCalc V3 or higher to estimate emissions from the dehydration system. The dehydration system must be accurately defined by monitoring and recording actual operating parameters associated with the dehydration system. The WV Division of Air Quality recommends the following actual operating parameters be measured in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GLYCalc emission modeling method:

- Natural Gas Flowrate: annual, per day, and maximum design capacity (MMscf/time)
- Absorber temperature and pressure
- Lean glycol circulation rate

As an alternative to the “Gas Analysis and Process Data”, emission estimating method discussed above, the permittee may elect to incorporate the following alternative calculation methods as provided by GLYCalc V4: [Gas Analysis and ARL Method (R/L+Gas)] or the [GRI ARL Method (for TEG units only)]

These alternative methods can be used to demonstrate compliance with 5.1.5, provided emissions are determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (GRI-95/0368.1). Additionally, the alternative methods shall also adhere to the recommendations for sampling and analysis of the wet glycol stream as presented in the GLYCalc Technical Reference User Manual and Handbood V4 when applicable.

[45CSR§30-5.1.c]

- [5.2.2.](#) In order to demonstrate compliance with the requirements of 5.1.6.c, the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device, except during SSM events.

[\[45CSR13, R13-2839, 6.2.1\]](#)

- [5.2.3.](#) The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a monthly basis for the glycol dehydration unit (DEHY01).

[\[45CSR13, R13-2839, 6.2.2\]](#)

5.3. Testing Requirements

- 5.3.1. Within 180 days of permit issuance or startup, whichever comes later and once within the last 2 years of this permit term, prior to submitting the permit renewal application, the permittee shall determine the composition of the wet natural gas by sampling in accordance with GPA Method 2166 and analyzing according to extended GPA Method 2286 analysis as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.

[45CSR§30-5.1.c]

- [5.3.2.](#) In order to demonstrate compliance with the flare opacity requirements of 5.1.6.b the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40CFR60 Appendix A Method 22. The permittee shall conduct this test within one (1) year of permit issuance or initial startup whichever is later. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of

background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR part 60, appendix A, Method 22 or from the lecture portion of 40 CFR part 60, appendix A, Method 9 certification course.
[45CSR13, R13-2839, 6.3.1]

5.3.3. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with section 5.1.6. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18.
[45CSR13, R13-2839, 6.3.2]

5.3.4. In order to demonstrate compliance with 5.1.5, upon request of the Director, the permittee shall demonstrate compliance with the HAP emissions thresholds using GLYCalc Version 3.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.
[45CSR13, R13-2839, 6.3.3]

5.4. Recordkeeping Requirements

5.4.1. For the purpose of demonstrating compliance with ~~5.1.2~~ 5.1.8, the permittee shall maintain records of all monitoring data documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, and the results of the check(s). The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR§30-5.1.c]

5.4.2. For the purpose of demonstrating compliance with section 5.1.6.c and 5.2.2, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.
[45CSR13, R13-2839, 6.4.1]

5.4.3. For the purpose of demonstrating compliance with section 5.1.6 and 5.3.3, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.
[45CSR13, R13-2839, 6.4.2]

5.4.4. For the purpose of demonstrating compliance with the requirements set forth in sections 5.1.6 and 5.3.4., the permittee shall maintain records of testing conducted in accordance with 5.3.4.
[45CSR13, R13-2839, 6.4.3]

5.4.5. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 5.2.2 and 5.2.3 and testing requirements of 5.3.2 through 5.3.4.
[45CSR13, R13-2839, 6.4.4]

- 5.4.6. For the purpose of demonstrating compliance with section 5.1.6.b, the permittee shall maintain records of the visible emission opacity tests conducted per Section 5.3.2.
[45CSR13, R13-2839, 6.4.5]
- 5.4.7. The permittee shall maintain a monthly record of the wet natural gas throughput through the dehydration system to demonstrate compliance with section 5.1.3 of this permit. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, R13-2839, 6.4.6]
- 5.4.8. All records required under Section 5.4.2 through 5.4.7 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, R13-2839, 6.4.7]

5.5. Reporting Requirements

- 5.5.1. Any violation(s)/deviation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 ~~must~~ shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include, at ~~a minimum,~~ least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s)/deviation(s), and any corrective measures taken or planned.
[45CSR§30-5.1.c, 45CSR13, R13-2839, 6.5.2]
- 5.5.2. The permittee shall submit a report of the sampling required by 5.3.1 to DAQ enforcement within 90 days of conducting said sampling. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. This report shall include a potential to emit (PTE) estimate modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 5.2.1. The emission estimate shall also incorporate a copy of the lab analysis obtained from the wet gas as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized and identification of where the compressor station is located before or after the liquids extraction plant.
[45CSR§30-5.1.c]
- 5.5.3. If permittee is required by the Director to demonstrate compliance with section 5.3.4, then the permittee shall submit a testing protocol at least thirty (30) days prior to testing and shall submit a notification of the testing date at least fifteen (15) days prior to testing. The permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.
[45CSR13, R13-2839, 6.5.1]
- 5.5.4. Any deviation(s) from the flare design and operation criteria in Section 5.1.6 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of discovery of such deviation.
[45CSR13, R13-2839, 6.5.3]

5.6. Compliance Plan

N/A

6.0. Exemption (Less than 1 ton/year Benzene Exemption Subpart HH)

- 6.1.1. Any permittee who chooses to qualify for the less than 1.0 tons/yr actual average emissions of Benzene per glycol dehydration unit exemption of 40CFR63 Subpart HH shall comply with the limit in Table 1.0.

Table 1.0 Glycol Dehydration Unit

<u>Description</u>	<u>Mg/yr</u>	<u>Tons/Yr</u>
<u>Benzene</u>	<u>< 0.9</u>	<u>< 1.0</u>

[45CSR13, R13-2839, 7.1.1]

- 6.1.2. To claim less than 1 ton/year of Benzene exemption as stated in Section 6.1.1 of this permit, the permittee shall adhere to the following:
- The actual average emissions of benzene from the individual still vent of the glycol dehydration unit to the atmosphere shall be less than 1.0 ton per year (0.9 megagram per year). Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.
[40C.F.R.§63.764(e)(1)(ii) or §63.1274(d)(2)]
 - The permittee shall determine the actual average benzene emission using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (CGR-95/0368.1); or

The permittee shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods set forth in either 40 CFR§63.772(b)(2)(ii) or 40 CFR §63.1282(a)(2)(ii), as applicable. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year. Permittees with federally enforceable controls are exempt from the requirements to conduct site-specific extended gas analysis.
[40C.F.R.§63.772(b)(2)(i)-(ii) or §63.1282(a)(2)(i)-(ii)]
 - All records required under Section 6 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13, R13-2839, 7.1.2]

Attachment A¹

Dominion Transmission, Inc. - Loup Creek Station
R13-2324B 109-00019

Run Time & Fuel Consumption Record

300 HP, Waukesha Auxiliary Power Generator (Model F1197G, 4-Cycle Rich Burn);

Month: _____

Year: _____

Day of Month	Run Time (hr/day)	Natural Gas Consumption Rate		Day of Month	Run Time (hr/day)	Natural Gas Consumption Rate	
		Daily (ft ³ /day)	Average Hourly ⁽²⁾ (ft ³ /hr)			Daily (ft ³ /day)	Average Hourly ⁽²⁾ (ft ³ /hr)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							

Monthly Natural Gas Consumption: _____ (ft³/mo.)

Monthly Hours of Operation: _____ (hours)

- (1) The CERTIFICATION OF DATA ACCURACY statement enclosed must be completed and signed by a responsible official within fifteen (15) days after the end of the calendar month. This record shall be maintained on site for a period of five (5) years from the date of certification. It shall be made available, upon request, to the Director or his/her authorized representative.

- (2) $\text{Daily Natural Gas Consumption Rate (ft}^3/\text{day)} / \text{Run Time (hr/day)} = \text{Average Hourly Natural Gas Consumption Rate (ft}^3/\text{hr)}$.
Average Hourly Natural Gas Consumption Rate shall not to exceed 2000 ft³/hr.

Attachment B^{1,2}

Dominion Transmission, Inc. - Loup Creek Station
R13-2324B 109-00019

Sample Annual Fuel Consumption Record

300 HP, Waukesha Auxiliary Power Generator (Model F1197G, 4-Cycle Rich Burn)

Year:

MONTH	Monthly Natural Gas Consumption Rate (ft ³ /mo.)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	
PERMIT LIMIT	1,000,000 ft³/yr.

¹ The CERTIFICATION OF DATA ACCURACY statement enclosed must be completed within fifteen (15) days of the end of the reporting period.

² This record shall be maintained on site for a period of five (5) years from the date of certification. It shall be made available, upon request, to the Director or his/her authorized representative.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry.

Name (Type or Print): _____

Signature¹: _____

Title: _____

Date: _____

Telephone No.: _____

Fax No.: _____

¹This form shall be signed by a "Responsible Official". "Responsible Official" means one of the following:

- a. For a corporation: the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or (ii) the delegation of authority to such representative is approved in advance by the Chief;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Chief.